PUR$L Tour - Tall wheat grass - Peter MacLeay, Kojonup.

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Rainfall: 500mm (approx 400mm growing season, 100mm out of season)

Paddock system

Paddock size: 12ha Species: Tall Wheat Grass (TWG) and phalaris

Variety: Tyrell

Date sown: May 2000 Rate: 20kg/ha and 2kg/ha Fertilizer: none

Soil type: sand over clay Limitations: areas of salt and areas of waterlogged soil.

- Use TIMERITE to spray for insects (redmite), keep an eye for grubs(if bad, spray)
- 150kg/ha of super/potash 1:5 applied each year

Grazing system

- Rotational grazed twice per year down to 500-600kg/ha dry matter before stock are taken off. Usual grazing times are June (after or near break of season) and September (spring flush).
- The main reason for only 2 grazing's is to maintain the balance between the annual component and perennials. This also encourage roots to develop further down the soil profile (roots are found down to a metre). Continuous tight grazing means shallower rooting depth and plant deaths.
- Estimated water conversion efficiency (from landholder) for various species:

Plant species	Estimated water use during its growth (mm)	Estimated dry matter produced (tons/ha)	Dry matter produced for each mm rainfall (kg)
Winter pasture	180	8	45
Annual crop	180	9	50
Trees	320	8	25-50
TWG (summer + autumn)	80	1-2	12-25

- Stocking rate for district is around 8DSE, can graze upto 16DSE on TWG areas when available.
- Grazing is used to manipulate pasture composition. Around year 3, clover is encouraged to germinate after the June grazing due to more light getting into the sward.
- Can potentially produce 10 ton/ha dry matter per year. 1-2t/ha out of season.

Whole Farm System

Farm size: 550ha Cropping: 180ha (2 in, 2 out rotation) Sheep No's: variable

Remnant veg: 24ha fenced Non-arable: 71.5ha (rocky areas and unfenced trees)

Saline: 11ha

Main reason for growing TWG and phalaris mix is to manage saline and surrounding waterlogged areas and to make the land more productive. The initial areas sown were in saline areas which were not croppable. Later sowings have been in areas upslope of saline areas which waterlog regularly and have lower crop yields.
TWG is suitable for areas which are moderately saline however production increases when grown on fresher soil.
At present approx. 35ha of the farm is under TWG this is likely to increase to around 50ha maximum. This will then cover most of the problem saline and easily identifiable waterlog areas.